Applicant Name Big Horn Conservation District (BHCD)
Project Name Montana Regional Coalbed Methane

Project Abstract

Coalbed Methane (CBM) is a new and growing industry, providing jobs and economic growth in southeastern Montana. In the Powder River Basin (PRB) in southeastern Montana, a regional groundwater monitoring program has been developed to address concerns over potential groundwater changes that may occur as a result of CBM production. The monitoring program is supported by the county conservation districts, U.S. Bureau of Land Management (BLM), U.S. Forest Service (USFS), and Montana Bureau of Mines and Geology (MBMG). The monitoring program documents baseline groundwater conditions, changes due to CBM water production, recovery of aquifers following development, and provides actual data to support decisions and, if needed, to dispel rumors. To provide scientific data and interpretations for decision makers, in support of the CBM Protection Act and the environmental impact statement (EIS), required monitoring data include water levels and water quality in wells and spring flow rates.

The goals of this project are (1) to provide groundwater data in support of CBM development decisions and (2) to actively involve landowners in data collection for their private wells and springs. Data collected will be publicly available through the Groundwater Information Center (GWIC). Monitoring by landowners will greatly expand the network to include private wells and springs and will directly support the CBM Protection Act (HB 572, 2001 legislative session).

The project will be administered by the BHCD, with technical services provided by the MBMG. Landowner workshops will be coordinated by the BHCD.

The project area includes roughly that portion of the PRB where CBM is most likely to be developed in Big Horn, Rosebud, Powder, Custer, and Treasure counties. Monitoring is focused in those areas and along the groundwater flow direction.

The anticipated life for the project is 24 months, beginning July 1, 2007.

Applicant Name Broadwater Conservation District
Project Name Whites Gulch Reclamation – Fish Barrier

Project Abstract

In 1995, the Broadwater Conservation District, in cooperation with Trout Unlimited, Montana Department of Fish, Wildlife & Parks (DFWP), and the Helena National Forest, conducted a placer mine reclamation project in Whites Gulch in the Big Belt Mountains utilizing funds from the Reclamation and Development Grants Program (RDGP). The project included reclamation of nearly 3,000 feet of stream and reshaping of almost 17 acres of placer-mined floodplain. A portion of the project also included installation of a fish barrier, as prereclamation site conditions had isolated a small population of pure strain native westslope cutthroat trout (WCT) in an old diversion ditch. While the ditch separated the sparse population from non-native brook trout, it also was unstable and actively eroding before the reclamation effort. Since 1995, the reclamation project area has provided suitable habitat and the WCT population is thriving. The Whites Gulch population is doing well enough that surplus fish will be used to establish new populations of westslope cutthroat trout in the Upper Missouri Basin in 2006.

Annual monitoring and maintenance of the project area and fish populations identified in 2005 suggested that a second fish barrier should be installed for several reasons:

- Existing barrier is aging and there is concern that a high flow event will damage the structure;
- Location of barrier adjacent to road has invited inadvertent use by the public which is contributing to loss of function; and
- Structural damage would compromise 12 years of maintenance work to retain separation of fish populations.

Project Goal: Ensure continued success of the Whites Gulch Reclamation Project which includes separation of native and non-native fish populations through constructed barriers.

Objective 1: Barrier should be cost effective, durable, and low maintenance.
Objective 2: Barrier should be less visible to the public to prevent inadvertent damage.

Responsible Organizations: Broadwater Conservation District, DFWP, and Helena National Forest.

Location: Whites Gulch drainage in the Big Belt Mountains, about 23 miles northeast of Townsend, on U.S. Forest Service lands, in T10N, R2E, Section 16 (SW1/4).

Duration: Three weeks.

Applicant Name Central Montana Regional Water Authority
Project Name Utica Well 2

Project Abstract

The problem within the project area is lack of a consistent, clean, and healthy source of municipal and domestic water for multiple cities and towns within Central Montana.

The goal of this project is to develop a method of accessing a proven municipal deep water source and securing additional water rights for the region. The objectives are to provide a final engineering design for a deep well, drill the well, case the well, and pump test and analyze the effects of the new well on the test well at the same location.

This project is sponsored by and will be carried out by the Central Montana Regional Water Authority, with assistance of experienced staff from Central Montana Resource Conservation and Development Area, Inc., (RC&D).

The specific project location is north of Utica in the NW1/4, SW1/4, Section 16, T14N, R13E. The target formation for the well is the Madison Limestone at a depth between 3,700 and 4,000 feet. This well will serve as one of a group of at least three wells to provide municipal water to communities in the five county areas, including the towns of Hobson, Judith Gap, Harlowton, Ryegate, Lavina, Broadview, Roundup, and Melstone. The well source water, as proven by an adjacent test well completed in November 2005, will be piped to the above communities, as later phases of the overall concept are developed. The quality of the water from this site will eliminate the need for all major water treatment, thereby reducing cumulative operation and maintenance (O&M) costs and conserving 25% to 30% of water required by eliminating the waste stream created by conventional treatment.

Water well drilling design and development should be completed within 12 months of start-up.

Applicant Name Gallatin Local Water Quality District (GLWQD)
Project Name Assessment and Distribution of Pharmaceuticals

Project Abstract

Pharmaceuticals, personal care products, and endocrine-disrupting chemicals (PPCP), released to the environment from human and/or animal waste, have been shown to cause adverse health effects in humans and wildlife. Recently, the presence of these compounds has been reported in the streams and groundwater of Montana. However, not enough information exists on the occurrence or fate and transport of these biologically active chemicals to assess or develop strategies to avoid future problems. Information available suggests some waste treatment approaches are much more effective at PPCP removal than others. Recognizing and implementing the best waste treatment approaches is of critical importance to maintaining safe water supplies for humans and wildlife in Montana. Areas undergoing rapid growth, such as the Gallatin Valley, are of critical importance. This project will assess the occurrence of PPCP in the waters of Gallatin County, determine the efficiency of various wastewater treatment approaches, and make recommendations for reducing PPCP loadings to state waters.

Project goals are:

- Document and quantify the ability of different wastewater treatment systems used in the Gallatin Valley to remove PPCP and quantify the loading of PPCP to surface or groundwater from treated effluent;
- Determine extent and magnitude of PPCP contamination in surface and groundwater in the Gallatin Valley; and
- Recommend options for reducing PPCP contamination of state waters.

Management responsibility will be shared between the GLWQD and Montana Bureau of Mines and Geology (MBMG), with primary responsibility resting with the district. The project area will include surface and groundwater sampling sites selected for susceptibility to pharmaceutical contamination, as well as samples of influent and effluent from individual, community, and municipal wastewater treatment facilities within Gallatin County. Project duration is July 1, 2007 through June 30, 2009.

Applicant Name Geraldine, Town of
Project Name Moonlight Meadow Test Hole Abandonment

Project Abstract

The Town of Geraldine is applying for this grant seeking funds to plug and abandon the well known as the Moonlight Meadow Well that was damaged on or around May 11, 2004. There is evidence that at least three separate aquifers were opened up and have been mixing ever since. There is at least 70 feet of drill stem, drill bit, and drill collar lost and/or lodged in the bore hole that has proven to be unrecoverable by the driller.

The town's goal for this project is to attempt to mitigate the continuing damage to state waters. It is only a matter of time before this water starts showing up in some surrounding wells. The Town of Geraldine is probably first in line because of the proximity of its municipal wells. There are also a number of stock water wells in the vicinity that could be affected by the toxic levels of iron present in one of the aquifers. Since the well has unrecoverable or lost drilling tools lodged in it, there is no other alternative but plugging and abandonment of this test well, per the Montana Code Annotated (MCA). The intention of the project is to seal off the intermingling of the aquifers and plug the damaged hole in the most economical method.

The Town of Geraldine will be in charge of the project.

The legal description of the site is SE 1/4 of Section 31 township 21N Range 12E the SE1/4 of SE 1/4 in Chouteau County. The damaged well sits southwest of the Town of Geraldine and is tucked in a valley east of what is commonly known in the area as Coffin Butte. The town's engineer estimates the project will take a month to complete.

Applicant Name Meagher County Conservation District (MCCD)
Project Name Hydrologic Investigation of the Upper Smith River Watershed, with an Emphasis on Groundwater/Surface Water Interaction

Project Abstract

This project is an investigation of the groundwater and surface water interaction within the Upper Smith River Watershed, a tributary of the Missouri River. The Smith River is an important recreational and agricultural area, located in Meagher and Cascade counties in west-central Montana. Irrigation is the cornerstone of this area's agricultural and economic well-being. Tourism is also important to the economy of the area and the State of Montana, with thousands of visitors traveling to the area annually to float and fish the nationally renowned Smith River.

MCCD has local responsibility to assess the local natural resources and to oversee their proper management. MCCD believes strongly that these decisions should be based on scientific information, not perception and/or emotion. The information from this hydrologic investigation is necessary to determine/predict the cumulative impacts that changes from wild flood irrigation to sprinkler irrigation and other water uses will have on the hydrologic system in the Upper Smith River Watershed. The investigation will also determine if use of groundwater for sprinkler irrigation is resulting in reduced flow in the Smith River. MCCD will carry out this project through a partnership with U.S. Geological Survey (USGS).

This project, a four-year study, will result in an increased understanding of the overall hydrologic system. It will help state and federal agencies, along with the concerned public, to better understand the interaction of the groundwater/surface water, an important component when determining the water allocation in the area. The ability to determine if groundwater is or is not "immediately or directly connected" to surface water is a critical component when determining the allocation of water by Montana law.

Information from this study will enhance the conservation, proper management, and development and/or preservation of a limited water resource. The information from this study will benefit agriculture, fish and wildlife habitat, associated outdoor-based recreation, and the general public. The decisions that will be made as a result of this study will benefit the people in the entire Smith River Watershed, the City of White Sulphur Springs, Meagher County, and the State of Montana through increased understanding of water resources and ability to make more informed water management decisions. The information gathered and technology used in this study may be used to help other watersheds in Montana and possibly other parts of the country.

There is a “crucial state need” to complete this project. Informed decisions and integrated water management planning regarding the future of this public resource cannot be made without scientific understanding.

Applicant Name Montana Board of Oil and Gas Conservation (BOGC)
Project Name Northern District Orphaned Well Plug and Abandonment

Project Abstract

The purpose of this grant request is to provide funding to properly plug orphaned secondary enhanced water injection wells used in the recovery of oil from an established oil field. These enhanced water injection wells are under pressure and could leak injected Madison formation water and hydrocarbons and cause groundwater and surface water contamination. The wells are not useful because the enhanced recovery project has reached the end of its life, and these wells have the potential of causing damage and/or pollution to subsurface formations, the state's water and air, and the surface around each well.

The BOGC will eliminate the threat of contamination by soliciting bids to plug and restore these wells. Under supervision of the board's staff, the successful bidder will properly plug and abandon each well, dispose of and/or remediate contaminants, and reclaim the surface location.

The wells were drilled and had produced oil according to the existing rules and were converted in the late 1960s to water injection. The last operator could no longer afford to produce the enhanced recovery field, so the wells were shut in. The operator's assets will not cover the liabilities to creditors, leaving the operator insolvent. The operator's bond has been forfeited and the bond is not sufficient to cover the cost of plugging and restoration. Since the company is currently insolvent or long since defunct, responsibility for the wells and any potential environmental damage rests with the BOGC and the state. The wells will be properly plugged and abandoned when funding is made available.

The orphaned wells are located near the Town of Cut Bank. By prioritizing the board's list of orphaned wells, in most cases the wells that present the highest potential for damage to the environment because of leaking or loss of mechanical integrity will be plugged first.

The project is estimated to take 24 months. The work will generally begin during the first suitable field season following the availability of funding.

Applicant Name Montana Board of Oil and Gas Conservation (BOGC)
Project Name Southern District Tank Battery Cleanup Orphaned Well Plug and Abandonment, and Site Restoration

Project Abstract

The purpose of this grant request is to provide funding to properly restore an orphaned and improperly abandoned tank battery facility, remove contaminated soils, and perform surface reclamation at this site. The tank battery site has the potential of causing damage to the groundwater, surface water, and the surface at the site.

The BOGC will eliminate the threat of contamination by soliciting bids to reclaim this improperly abandoned tank battery site. Under supervision of the board's staff, the successful bidder will dig up the site, remove the buried tanks and equipment, dispose of and/or remediate contaminants, and reclaim the surface location.

The former operator could no longer afford to produce the wells, so the wells were plugged and the battery abandoned. Since the company is long since defunct, responsibility for the battery site and any potential environmental damage rests with the BOGC and the state. The battery site will be properly cleaned up when funding is made available.

The orphaned battery site is near Big Wall field, about 13 miles northeast of Roundup. By prioritizing the board's list of orphaned wells and orphaned sites, in most cases the site that presents the highest potential for damage to the environment will be plugged first.

The project is estimated to take 24 months. The work will generally begin during the first suitable field season following availability of funding.

Applicant Name Montana Board of Oil and Gas Conservation (BOGC)
Project Name Southern District Orphaned Well Plug and Abandonment, and Site Restoration

Project Abstract

The purpose of this grant request is to provide funding to properly plug and abandon orphaned oil/gas (bond forfeiture) and leaking orphaned abandoned wells and perform surface reclamation. The wells are uneconomic and have the potential of causing damage to subsurface formations, the state's water, and the surface around each well.

The BOGC will eliminate the threat of contamination by soliciting bids to plug and abandon the wells. Under supervision of the board's staff, the successful bidder will properly plug and abandon each well, dispose of and/or remediate contaminants, and reclaim the surface location.

The wells produced oil/gas or were plugged in the past. The operators could no longer afford to produce the wells, so the wells were shut in. The companies' assets will not cover the liabilities to creditors, leaving the operators insolvent. Since the companies are currently insolvent or long since defunct, responsibility for the wells and any potential environmental damage rests with the BOGC and the state. The wells will be properly plugged and abandoned when funding is made available.

The orphaned wells are located throughout Montana. By prioritizing the board's list of orphaned wells, in most cases the wells that present the highest potential for damage to the environment because of leaking or loss of mechanical integrity will be plugged first.

The project is estimated to take 24 months. The work will generally begin during the first suitable field season following availability of funding.

Applicant Name Montana Department of Environmental Quality (DEQ)
Project Name Bald Butte Mine and Millsite Reclamation

Project Abstract

The Bald Butte Millsite and Devon/Sterling and Albion mines project is located approximately 17 miles northwest of Helena, near the headwaters area of Dog Creek. The headwaters of the basin are located on the west side of the Continental Divide, southwest of the historic mining community of Marysville. The project encompasses the western portion of the Marysville Mining District and includes the Bald Butte Millsite tailings and waste rock areas, and the Devon/Sterling and Albion mines waste rock area. The Bald Butte Millsite tailings and waste rock are currently ranked No. 11 on the DEQ Mine Waste Cleanup Bureau (MWCB) Priority Sites List. The Devon/Sterling and Albion mines are not ranked on this list.

The Bald Butte Millsite and the Devon/Sterling and Albion mines are located approximately 3.8 and 3.0 air miles, respectively, southwest of the town of Marysville in Lewis and Clark County, within the E ½ of Section 9, NW ¼ of Section 10, E ½ of Section 16, and NE ¼ of Section 21, Township 11 North and Range 6 West, Montana Principal Meridian. The sites are located within the Dog Creek drainage, a tributary of the Little Blackfoot River. There are several possible access routes to the site. The most accessible route is to proceed west on Highway 12 from Helena over MacDonald Pass. Near the bottom of MacDonald Pass, turn right on Dog Creek Road, which becomes Forest Road 1855, and follow it for approximately 12.8 to 13.5 miles respectively to the millsite and mines.

The MWCB would conduct mine reclamation; mine waste would be consolidated into a single mine waste repository with an impermeable bottom liner and a cap placed over the repository area, thereby eliminating receptor contact with the contaminated mine wastes. After reclamation activities are complete, the site will be revegetated with native plant species. Project construction is estimated to take 90 days.

Applicant Name Montana Department of Environmental Quality (DEQ)
Project Name Belt Acid Mine Drainage (AMD) Mitigation

Project Abstract

The Belt AMD site, an abandoned coal mine, discharges an average of 150 gallons per minute (gpm) of very low pH water laden with iron, aluminum, chromium, cadmium, and other metals into Belt Creek. The Belt AMD results from two draining mine adits, the Anaconda Drain which produces ~140 gpm the Belt AMD and the French Coulee Drain which produces ~10 gpm.

The goal of a "source control" solution for the Belt AMD Mitigation project is to improve human health, the environment, and riparian habitat and aquatic life in Belt Creek. This goal would be accomplished by reducing the Belt AMD and metals loading to Belt Creek. Implementing the source control solution to the Belt AMD will be accomplished by reducing the groundwater recharge to the mine workings generating the Belt AMD via land-use changes, including crop change, horizontal well installation to dewater shallow aquifers above unflooded mine workings, and grouting selective mine workings locations to isolate flooded areas of the mine from partially or unflooded areas of the mine workings.

The abandoned underground Anaconda Coal Mine site is west of Belt, beneath agricultural land overlooking the Belt Creek drainage (Belt U.S. Geological Survey [USGS] 7.5 Minute Quadrangle). The site encompasses 5.5 square miles of mine workings, both flooded and unflooded by groundwater. Elevation at the Anaconda Coal Mine Site is from 3,600 feet to 3,900 feet above mean sea level. Legal description of the site is Township 19 North, Range 6 East, Sections 26, 27, 28, 32, and 33 of the Montana Principal Meridian. The drilling of the horizontal wells to dewater shallow aquifers over the unflooded portions of the mine workings and grouting selective mine workings to cut off groundwater flow paths within the mine is estimated to take approximately 300 work days, including drilling the horizontal wells, installing drain pipes, and drilling and grouting flow paths in the mine.

Applicant Name Montana Department of Environmental Quality (DEQ)
Project Name Landusky Mine

Project Abstract

Pegasus Gold Corporation (PGC) conducted open pit mining at the Landusky Mine between 1979 and 1996. PGC declared bankruptcy in 1998, and DEQ now operates water treatment systems at the site, using funds from short-term water treatment bonds. Significant deterioration of water quality in Swift Gulch was first noted in 1999. Because impaired water quality in Swift Gulch became evident after the bankruptcy of PGC, no reclamation or water treatment bonds had been established to address conditions in that drainage.

The DEQ and the U.S. Bureau of Land Management (BLM) modified mine reclamation plans to improve water quality in Swift Gulch. Despite efforts to that end, no improvements have been observed. Additional studies are needed to better characterize groundwater flow systems adjacent to Swift Gulch to determine the best course for further remedial actions.

The goal of this project is to improve water quality in Swift Gulch. The objective is to characterize groundwater flow in the vicinity of Swift Gulch and the adjacent Landusky pit complex so that the relative effectiveness of various remedial options can be accurately assessed and appropriate actions can then be implemented.

The DEQ, in cooperation with the BLM, is responsible for implementing the reclamation program at the Landusky Mine. Subsequent to closure of the bankruptcy case, in June 2004, the BLM placed the mine sites under its Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) authority via an Action Memorandum. The action allows the BLM to continue to direct remedial activities at the sites despite the absence of an operator. The BLM is preparing an Engineering Evaluation/Cost Assessment (EE/CA) addressing long-term site management options. It is anticipated that the Draft EE/CA will be published in June 2006.

The Landusky Mine is 50 miles southwest of Malta, adjacent to the southern boundary of the Fort Belknap Indian Reservation. The Landusky Mine is in Sections 14, 15, 22, and 23, Township 25 North, Range 24 East, Phillips County. The Swift Gulch study area is in Sections 10, 11, 14, and 15 of Township 25 North, Range 24 East.

This project would take approximately 24 months.

Applicant Name Montana Department of Environmental Quality (DEQ)
Project Name Snowshoe Mine Reclamation

Project Abstract

The Snowshoe Mine site, an abandoned hardrock mine, is ranked ninth on DEQ's Abandoned Hardrock Mine Priority Sites List. The Snowshoe Mine includes mill tailings and waste rock located within the floodplain of Snowshoe Creek. The uncontained waste material impacts water and sediment quality in Snowshoe Creek. The contamination from heavy metals is not limited to, but includes, arsenic (As), cadmium (Cd), copper (Cu), Lead (Pb), and zinc (Zn). Mining at the Snowshoe produced lead, silver, and gold; it has been inactive since the 1960s.

The Snowshoe Mine (T 28 N, R 31 W, Sec. 7) is approximately 16.5 miles southeast of Libby, in Lincoln County. It sits at the head of the Snowshoe Creek drainage, a tributary of Big Cherry Creek which flows into the Kootenai River. The nine-acre reclamation project lies within the Kootenai National Forest (KNF) and is adjacent to the Cabinet Mountains Wilderness Area. The majority of the site is located on patented claims; however, a small portion overlaps the KNF.

The DEQ in cooperation with the U.S. Department of Agriculture (USDA) Forest Service (USFS) and the KNF, plans to remove the tailings from the banks of Snowshoe Creek and deposit them in a repository on KNF property. The largest of the four waste rock dumps will be treated in place and the remainder of the small waste dumps will be left as they are because of their inaccessibility. The goal of the project is to reduce or eliminate the impact to human health and the environment. Under the preferred reclamation alternative, human health risk will be reduced by 64% and ecological risk will be reduced by 83%, an average overall risk reduction of 74%.

The DEQ plans to develop the repository and construct access roads during the 2006 construction season; the DEQ will remove the tailings, cover the waste rock, and revegetate the site during 2007.

Applicant Name Montana Department of Environmental Quality (DEQ)
Project Name Swift Gulch Placer Tailings and Wetland Establishment

Project Abstract

The Swift Gulch watershed originates near the Landusky Mine and flows northwest, joining South Bighorn Creek about 2,000 feet up-gradient of the Fort Belknap Indian Reservation boundary. Mineral extraction has occurred within this watershed since the late 1800s, and has included development of small adits, extensive placer mining throughout the length of the creek channel, and recent open pit mining along the drainage divide between Swift Gulch and King Creek to the south.

Pegasus Gold Corporation (PGC) conducted open pit mining at the Landusky Mine between 1979 and 1996. PGC declared bankruptcy in 1998, and the DEQ now operates water treatment systems at the site, using funds from short-term water treatment bonds that had been posted by PGC. Significant deterioration of water quality in Swift Gulch was first noted in 1999. Because impaired water quality in Swift Gulch became evident after the bankruptcy of PGC, no reclamation or water treatment bonds had been established to address conditions in that drainage.

DEQ and U.S. Bureau of Land Management (BLM) modified mine reclamation plans to improve water quality in Swift Gulch. Despite efforts to that end, no improvements have been observed.

The goal of this project is to improve water quality in Swift Gulch through rehabilitation of the reach of stream previously disrupted by placer dredge mining. As part of stream reconstruction, a series of ponds would be constructed to trap sediment that forms when iron-rich groundwater enters the stream near its headwaters, becomes oxidized, and forms a precipitate. Clean-out of the upper ponds as part of routine mine site maintenance would prevent this material from migrating farther downstream and influencing water quality on the Fort Belknap Indian Reservation. Ponds constructed lower in the drainage will be designed as wetlands which can further mitigate impaired water quality upstream from the reservation.

DEQ, in cooperation with the BLM, is responsible for implementing the reclamation program at the Landusky Mine. Subsequent to closure of the bankruptcy case, in June 2004, the BLM placed the mine sites under its Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) authority via an Action Memorandum. The action allows the BLM to continue to direct remedial activities at the sites despite the absence of an operator. The BLM is preparing an Engineering Evaluation/Cost Assessment (EE/CA) addressing long-term site management options. It is anticipated that the Draft EE/CA will be published in June 2006.

The Landusky Mine is 50 miles southwest of Malta, adjacent to the southern boundary of the Fort Belknap Indian Reservation. The Landusky Mine is in Sections 14, 15, 22, and 23, Township 25 North, Range 24 East, Phillips County. The Swift Gulch study area is in Sections 10, 11, 14, and 15 of Township 25 North, Range 24 East.

This project would take approximately 24 months.

Applicant Name Montana Department of Natural Resources and Conservation (DNRC), Trust Land Management Division (TLMD)

Project Name Reliance Refinery

Project Abstract

Kalispell Pole & Timber, Reliance Refinery, and Yale Oil Facilities together comprise a state superfund Comprehensive Environmental Cleanup and Responsibility Act (CECRA) site under the regulatory authority of the Montana Department of Environmental Quality (DEQ). The site is in the City of Kalispell. The State of Montana owns the Reliance Refinery site and leased it out for refinery operations from the 1930s to the 1960s. The state was one of several potentially liable parties sued by the DEQ under state superfund law. CECRA statutes encourage settlement of claims. The State of Montana, through the DNRC-TLMD negotiated a settlement agreement with the DEQ, which acknowledged the State's partial liability for site remediation and indemnified the state from cross-claim litigation from other potentially liable parties. Pursuant to the CECRA, any such settlement must be made available for review and comment by other potentially liable parties and the public and must also be approved by the court having jurisdiction. Burlington Northern & Santa Fe Railroad (BNSF), also a potentially liable party, opposed the court's approval of the DNRC-DEQ consent decree, alleging it was favorable to the state as landowner, and adverse to the BNSF. The Montana First Judicial District Court reviewed the consent decree and BNSF's opposition testimony and exhibits and approved the DNRC-DEQ consent decree on March 24, 2006.

The DEQ is proceeding with remediation activities at the site. These activities recently entailed data collection and summarization, and currently consist of completion of a resource inventory/risk assessment/feasibility study (RI/RA/FS). Pursuant to the consent decree, the State of Montana is liable for 27.5% of invoiced remediation costs. Upon completion of the RI/RA/FS, DEQ will evaluate the alternative remediation methods, select the remediation option that optimally meets the goals and objectives for remediation under the CECRA, and produce a record of decision (ROD). This, in turn, provides the basis upon which to prepare a detailed site remediation plan and solicit bid proposals for the selected remediation plan. The DEQ estimates these project tasks will be complete or nearly complete by FY 2009.

The DEQ invoices liable parties for its costs, unless the costs are covered by other direct sources of funding. The DNRC-TLMD's settlement agreement with the DEQ resulted in a negotiated settlement of $126,890 for the State's share of costs invoiced through December 31, 2004. The department has already paid $50,000 of this obligation. Per the settlement agreement, the state is responsible for 27.5% of invoiced costs after January 1, 2005.

The state's share of remediation costs through final design and contracting is estimated to total approximately $990,000. This grant request is intended to cover a portion of the department's share of invoiced costs through FY 2009.

Applicant Name Montana Department of Natural Resources and Conservation (DNRC), Water Resources Division (WRD)
Project Name St. Mary Facilities Rehabilitation

Project Abstract

The St. Mary Facilities, on the Blackfeet Indian Reservation, transfer water from the St. Mary River Basin to the Milk River Basin. The facilities have operated for over 89 years with only minor repairs and improvements since initial construction. All of the structures have exceeded their design life and critically need major repairs or replacement. Major structures consist of Sherburne Dam, St. Mary Diversion Dam and headworks, 29 miles of canal, St. Mary and Hall Coulee steel siphons, and five concrete drop structures. The siphons are plagued with slope stability problems, metal fatigue, concrete deterioration, and leaks. The concrete drop structures are severely deteriorated. Landslides along the canal route and numerous structural deficiencies make the canal unstable and restricted, and most of the wasteways are inoperable. The canal capacity has declined from its 850 cfs design to 670 cfs. The economy and culture of the entire Hi-Line region was built around, and dependent upon, this water supply. Without accelerated local, state, and federal action to rehabilitate these facilities, the likelihood of a catastrophic failure is greatly increased.

State and local efforts, spearheaded by the lieutenant governor and governor's offices, are aggressively seeking federal funding for preplanning, design, and construction activities at these facilities.

Success of the overall project hinges on federal appropriations from Congress. The state-formulated proposal is separated into two phases:

Phase 1: Planning and Design ($8,025,000); and
Phase 2: Construction (St. Mary) (estimated $135 million).

The Phase 1 appropriation request has been drafted and submitted to Sen. Conrad Burns. The Reclamation and Development Grants Program (RDGP) funds would provide a state match contribution for Phase 1. Legislation that addresses the Phase 2 proposal was submitted to Legislative Drafting Services in March 2006.

Phase 1 will be managed by the DNRC; Phase 2 is expected to be managed by USBR/DNRC, either of which could assume the lead-agency role. Both agencies have the full complement of necessary staff and expertise to manage the overall project. An aggressive five-year completion schedule for Phases 1 and 2 has been initiated by the state in an effort to avert a catastrophic failure.

Applicant Name Montana Tech of the University of Montana
Project Name Butte Native Plant Propagation

Project Abstract

Butte's natural ecosystem has been negatively impacted from 130 years of mining and smelting activities. Five-hundred individual waste rock and tailings dumps occur where a native subalpine vegetation community once flourished. Many dumps were reclaimed with revegetated soil caps of grasses and alfalfa providing temporary soil stability. The native flora of the Butte Hill and much of Summit Valley is represented by small remnant patches which produce an insufficient seed source to propagate and expand into the rest of the landscape which is thinly vegetated with weedy species.

The goal of this project is to provide plants to reestablish native species diversity into open spaces of` Butte to produce a sustainable and aesthetically pleasing ecosystem. The goal will be accomplished by constructing a greenhouse nursery and hardening facility to propagate native plant material collected on the Butte Hill, in Summit Valley. Previously identified plant species (identified in a pilot project conducted by Butte-Silver Bow [BSB] Planning Department, and a project conducted by K. Douglass and volunteers from the Native Plant Society) will be used. The variety of plant species will continue to increase through collection of local native plant species.

The Biology Department of Montana Tech of the University of Montana will be responsible for and supervise construction of the facility and the project. Faculty, staff, and students will manage the greenhouse, collect native plant seeds and vegetative material for propagation, conduct experimental propagation techniques, prepare the plants for distribution and planting, and monitor success of the plantings in the field. BSB staff will participate in propagation of plant material.

The facility will be located at Montana Tech. The plants produced will be available for planting on the Butte Hill and surrounding Summit Valley.

The project will take approximately 12 months to complete.

Applicant Name Powell County
Project Name Milwaukee Roundhouse Voluntary Cleanup

Project Abstract

The Milwaukee Roundhouse site is in Powell County, the NW ¼ of T7N, R9W, Section 4 (N 46° 23.598', W 112° 44.415). The site encompasses 14.5 acres of commercial property at the end of Kentucky Street immediately adjacent to the Deer Lodge city limits. The northernmost portion of the site (not included in the 14.5 acres) is privately owned and will be cleaned up using private funding not addressed in this application. The site abuts the Clark Fork River on the east side and is across the river from the recently developed River Park System. From 1908 until 1980, the site was used for railroad locomotive repairs that led to widespread soil and limited groundwater contamination with petroleum products and, to a lesser extent, chlorinated solvents. Since the bankruptcy of the owners in 1980, the site has sat vacant and unusable and has been classified by the Department of Environmental Quality (DEQ) as a high-priority Comprehensive Environmental Cleanup and Responsibility Act (CECRA) site.

Limited funding has prevented the state from proceeding with cleanup of the site. In 2005, Powell County took title and has pursued funding for partial site cleanup through the U.S. Environmental Protection Agency (EPA) Brownfield Program. Powell County, as the project sponsor, has also developed a Voluntary Cleanup and Redevelopment Act (VCRA) plan to address site cleanup. Additional funding through the Montana Department of Natural Resources and Conservation (DNRC) Reclamation and Development Grants Program (RDGP) is critical to allow for a complete cleanup of the site and removal from the DEQ-CECRA list. With full funding from the two grant programs, cleanup of the site can be completed within two years and will allow redevelopment of the property to include a job-training center for environmental services careers. Reclamation and remediation activities present one of the best opportunities for long-term employment in this region.